The Secretary of Energy
Washington, DC 20585

May 4, 2004

The Honorable Edward J. Markey
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Markey:

Thank you for your letter to President George W. Bush concerning the availability and affordability of heating oil for this past winter.

You recommended four measures to alleviate the concern for heating oil. Two of these recommendations were implemented: the Northeast Home Heating Oil Reserve was kept at a high state of readiness throughout the winter, and the President directed release of additional funds for the Low-Income Home Energy Assistance Program.

With respect to temporarily suspending purchases of oil for the Strategic Petroleum Reserve (SPR), in November 2001, President George W. Bush directed me to fill the SPR to capacity in a deliberate and cost-effective manner. Since that time the Department has been filling the SPR at a moderate pace, using competitive contracts and direct injection of royalty oil. The reserve was established as a national security asset, and our current policy is designed to maintain that asset in a transparent manner, minimizing any impact on the energy markets. Absent a severe energy supply interruption, the Department intends to continue to take delivery of oil for the Strategic Petroleum Reserve as it becomes contractually due. I recently asked the Administrator of the Energy Information Administration (EIA) to evaluate the price impacts of SPR fill activity since April 2002. A copy of EIA's analysis is enclosed.

Similar reasoning applies to the recommendation that we consider swapping oil from the Reserve. If we shift the focus of our attention away from energy security to controlling near-term prices, over time we will deplete the Strategic Petroleum Reserve and the energy assurance it provides and increase our vulnerability to energy supply disruptions.

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If you require further information, please contact me or Mr. Rick A. Dearborn, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

Spencer Abraham

Enclosure

Department of Energy
Washington, DC 20585

February 6, 2004

MEMORANDUM TO: THE SECRETARY

FROM: GUY CARUSO
ADMINISTRATOR
ENERGY INFORMATION ADMINISTRATION

SUBJECT: THE IMPACT OF STRATEGIC PETROLEUM RESERVE ADDITIONS ON CRUDE OIL PRICES

This is in response to your request that the Energy Information Administration (EIA) provide you with its assessment of the impact of additions to the U.S. Strategic Petroleum Reserve (SPR) from April 2002 to date on U.S. and global crude oil markets. The average SPR fill rate since April 2002 was 120 thousand barrels per day, with a monthly peak rate of 210 thousand barrels per day. Our overall assessment of how these additions may have affected oil markets can be summarized as follows:

- Given OPEC members' recent demonstrated ability to alter production to influence prices, the actual impact of SPR additions on oil prices could be close to zero. Had SPR additions not been made, OPEC members who operate at variable production levels may well have responded with offsetting output adjustments, maintaining a price and inventory profile identical to that which actually occurred. In this case, price impacts at or near zero are entirely plausible.

- EIA has also developed a standard "rule of thumb" for assessing the effect of unexpected disruptions to commercial oil supply -- that 1 million barrels per day removed from the world market has a price impact of $3 to $5 per barrel. Applying this rule, SPR additions, even at 200 thousand barrels per day, would have a price impact of about 60 cents to $1 per barrel. However, because SPR additions were announced and anticipated by the markets, the standard rule may overstate actual impacts.

EIA is aware that some market analysts have recently suggested that the SPR additions have had a much larger impact on oil prices. For example, a representative of the Air Transport Association, was recently quoted in press reports as saying that SPR additions "were adding enough demand to the world marketplace to drive up the price by more than $6 per barrel." In EIA's view, however, impact estimates this high (or even higher) use reasoning that does not withstand scrutiny.

- One claim made is that SPR additions, especially during a time of rising crude oil prices, push prices higher by exacerbating the tightness of the global oil supply/demand balance. However, additions to the SPR at the average SPR fill rate since April 2002, amount to only 0.15 percent of global demand – hardly enough to drive a 25% to 33% price

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increases in the global market. A variant of the same approach focuses on the share of SPR additions in the overall change in oil demand. However, as Paul Horsnell of Barclays Capital Research puts it, "The world consumed 29.2 billion barrels of oil in 2003, while the SPR grew by less than 0.04 billion [*barrels*]. At the margin, barrels of incremental global demand outnumbered the SPR fill by about fifteen to one." [Note: EIA's figures are slightly different, showing a ratio of 13.4 to 1]

- Another line of argument focuses on the level of commercial oil inventories, making the assumption that all of the oil that has been added to the SPR would, but for those additions, have flowed into commercial storage, resulting in much higher commercial stocks than the current estimate (as of January 16, 2004) of 265.2 million barrels, the lowest level since 1975. This reasoning, however, relies on key assumptions regarding the operation of world oil markets that are both implausible and mutually inconsistent:

  - First, it assumes no supply response on the part of oil exporters to a change in the level of SPR additions. Given the pre-announced and steady pattern of the SPR additions, it could reasonably be expected that major oil exporters, which have increasingly in recent years sought to reassert control over oil prices by managing output, would in fact produce less if these purchases were not taking place, rather than allowing an equivalent amount of crude oil to flow into commercial inventories.

  - Second, even in the unlikely event that supply remained at an unchanged level in a scenario with no additions to the SPR, the significant lowering of oil prices that the "high impact" analysts claim in such a scenario should have raised world oil demand above the levels that actually occurred. Even with no supply adjustments (unlikely) there would also have to have been no demand response to significantly lower prices (also unlikely) for all of the SPR additions made over this period to have shown up in current commercial inventories.

  - Thirdly, oil companies are unlikely to have to have added to commercial inventories if the SPR oil had been made available. Company inventory positions are at current levels because of cost cutting measures, better inventory management techniques and fiscal incentives. Crude oil has been available on the international market and the companies have chosen to operate with leaner inventories.

What factors does EIA believe have significantly impacted oil markets?

Although you did not specifically request it, we thought you might also be interested in our assessment of key factors currently driving oil markets. Since early 2002, a number of important fundamental factors have contributed to high crude oil prices, including rising demand; OPEC production cuts; supply disruptions in Venezuela, Nigeria, and Iraq; and low inventories.

- **The rise in crude oil prices to the $27-28-per-barrel range in late summer 2002 only represented a recovery to the levels seen prior to the terrorist attacks of September 11,**

2001, which depressed oil demand. By the second quarter of 2003, U.S. economic recovery began to accelerate. Coupled with surging Chinese growth and modest recovery elsewhere, strong economic activity has boosted U.S. and global oil demand significantly. Cold weather and fuel switching from natural gas to oil, both last winter and since mid-December 2003, have added to demand pressures.

- **OPEC cut its output quotas sharply at the beginning of 2002, in response to the sharp decline in prices after September 11, 2001.** This fourth cut, in a series of reductions that began in February 2001, sharply curtailed oil supplies just as oil demand began its recovery. In less than a year, OPEC reduced its ceiling level (for the 10 members excluding Iraq) by 5 million barrels per day, and actual production by up to 4 million barrels per day. This reduction in supply tightened the global oil balance significantly, resulting in declining inventories relative to normal throughout the second half of 2002. The roots of current oil price volatility trace to these actions, since OECD stocks had already reached the near-record lows seen in 2000 by November 2002, just ahead of Venezuela's oil disruption.

- **In December 2002, a strike by petroleum workers in Venezuela drastically reduced global crude oil supplies.** The impact was felt most in the United States, the largest consumer of Venezuelan crude oil. Nigerian production was also curtailed in early 2003 due to unrest.

- **Crude supply disruptions in Venezuela, Nigeria and Iraq in late 2002 and early 2003 were not fully offset by increased supply from other sources.** While there can be no doubt that Saudi Arabia and the OPEC 10 dramatically boosted production following the Venezuelan outage, as well as prior to and following the Iraq war, the initial increases were slow in coming, with December 2002 and January 2003 aggregate production levels down sharply from already-tight November 2002 supply levels. When the surge in OPEC supply did occur, the bulk of the increase (excluding Venezuela) appears to have gone to China and other Asian refiners, at least through the first half of 2003.

- **OPEC cut quotas twice during 2003, reducing global supplies.** The first was effective June 1, and they later agreed to cut quotas again effective November 1. While OPEC members continued to produce more than their agreed-upon quotas, production remained low enough to sustain WTI prices above $30 per barrel for most of 2003.

- **By the end of 2003, there was some recovery in product inventories, but U.S. crude oil inventories reached their lowest levels since the mid-1970s.** While OPEC appears to have sustained high production levels over the second half of 2003, OECD stocks in November 2003 dipped back below November 2000 levels. Some recovery in either crude oil or product stocks relative to normal has occurred over the last 6 months both in the U.S. and worldwide, but supply has generally been inadequate to meet improving oil demand and at the same time rebuild both crude oil and product stocks. As such, the last year has been characterized by a "cycling" of this shortfall from region to region and product to product.

Obviously, it is impossible to address in full detail all of the important factors affecting oil markets in a brief memorandum. Please feel free to contact us if you have any additional questions.